STARBASE La Luz Academy

SUCCESS STORY Air Force Research Laboratory Space Vehicles Directorate 505.846.4704/4321 www.vs.afrl.af.mil

Congresswoman Heather Wilson assists Starbase student at computer joystick as he "flies" experimental technology through cyberspace.

Payoff: The STARBASE® La Luz Academy is an AFRL effort to help mitigate an anticipated shortfall of future scientists and engineers critical to maintaining America's technological edge in national defense. By showing school children today what interesting and important careers the serious study of science and math can lead to, AFRL is helping to shape the defense researchers of tomorrow.

Accomplishment: Working with local schools, AFRL has developed extracurricular coursework in a classroom and hands-on research setting to present science and math in a practical, palatable way to students who otherwise might avoid these subjects. And by doing so, students get to work with AFRL scientists and engineers and others from many federal and private organizations responsible for creating technology needed by the military.

Background: Launched in 2004 by U.S. congresswoman Heather Wilson in a ribbon-cutting ceremony at AFRL's Phillips Research Site, Kirtland AFB, a novel education program took wing: The STARBASE® La Luz Academy. Its goal: Line-up elementary and secondary students for what AFRL hopes will be future careers as scientists and engineers, not only with the Air Force, but also with other federal research institutions, universities, and those private

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companies where much of the nation's defense technology is developed.

The Air Force STARBASE® La Luz Academy has three main components, or "Flights." These Flights are designed to provide continuity for students as they progress from elementary to middle school and from middle to high school.

- The Mars Missions Flight, for fifth-grade students, is based on the Challenger Center for Space Science Education's acclaimed *Marsville®, the Cosmic Village* program. It simulates students preparing for a manned mission to Mars and culminates in a Link-Up Day event where students come together to build a Martian Colony.

- The Providing Engineering and Technology Experiences for Students (PETES) Flight, for middle school students, engages students in a series of fun, educational, hands-on curriculum days, centered around math, science, and engineering. PETES students also serve as mentors during the Mars Missions Flight Link-Up Day event.

- The Students Planning and Conducting Engineering (SPACE) Flight, for high school students, engages students in a real-world Research and Development (R&D) activity, under the guidance of scientists and engineers volunteering as mentors. At the end of the school year, the SPACE students present their R&D results to their peers, mentors, and various dignitaries at the annual SPACE Symposium. PETES students are invited to attend the symposium to listen to the formal presentations, visit the SPACE student display booths, and share their own experiences in the PETES Flight with others.